DOCUMENT RESUME

ED 472 994 EA 032 329

AUTHOR	Renchler, Ron
TITLE	School Organization: Grade Span. Trends and Issues.
INSTITUTION	ERIC Clearinghouse on Educational Management, Eugene, OR.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE	2002-00-00
NOTE	8p.
AVAILABLE FROM	ERIC Clearinghouse on Educational Management, 5207 University of Oregon, Eugene, OR 97403-5207. Tel: 541-346-2332; Tel: 800-438-8841 (Toll Free); Fax: 541-346-2334; Web site: http://eric.uoregon.edu. For full text: http://eric.uoregon.edu/trends_issues/organization/index.html.
PUB TYPE	ERIC Publications (071) -- Reports - Descriptive (141)
EDRS PRICE	EDRS Price MF01/PC01 Plus Postage.
DESCRIPTORS	Age Grade Placement; Educational Administration; Elementary Secondary Education; Grouping (Instructional Purposes); *Instructional Program Divisions; School Organization
IDENTIFIERS	*Grade Span Configuration

ABSTRACT

This paper examines grade spans (grade configurations) and their importance in community school systems. Research has shown that geographic location often dictates the kind of grade configuration districts use. Furthermore, every grade configuration has strengths and weaknesses, and school officials must focus on developing the positive potential within any given grade span. However, knowing which aspects to enhance can be difficult. The sheer number of variables that come into play when measuring grade-span effectiveness complicates efforts to understand this important component of education. For example, in one of the few empirical studies on grade span, researchers found that 8th-graders in elementary settings (K-8, K-9, 3-8) outperformed 8th-graders in other grade configurations. But the question as to why they learned better remains unanswered. Many current grade configurations can be traced to historical developments, such as passage of child-labor laws, meaning that such configurations had little to do with educational efficacy. Research shows that grade span can work in subtle and not-so-subtle ways to affect student learning. One study found that students suffer achievement loss during transition years and that students who transitioned to high school in grade 7 were less likely to drop out than students who began high school in grades 9 or 10. (RJM)

Reproductions supplied by EDRS are the best that can be made from the original document.

ED 472 994

Trends and Issues

School Organization: Grade Span

ERIC Clearinghouse on Educational Management

College of Education · University of Oregon
5207 University of Oregon
Eugene OR 97403-5207
541-346-2332 · 800-438-8841
Fax: 541-346-2334
This document is available on our website: http://eric.uoregon.edu

2002

EA032319

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ERIC Educational Resources Information Center

BEST COPY AVAILABLE

Trends and Issues

School Organization: Grade Span

This section is adapted from a previously published Research Roundup on grade span.

by Ron Renchler

Despite the very great likelihood that grade span, or grade configuration, has a powerful influence on the success of community school systems and the students they serve, empirical research on the topic in the last decade has been very sparse. A few studies have attempted to gauge the influence of various grade configurations on academic achievement of students at the state level, but other reports are anecdotal or descriptive in nature and describe the perceived benefits and drawbacks of various grade configurations. Studies on the relationship of grade span to other measures of school success, such as students' socialization skills or the existence of a positive school culture, are also scarce.

Perhaps the dearth of empirical research stems from the fact that grade configuration is to some degree out of the hands of administrators who run the schools. The exigencies of geographic location, student populations, limited financial resources, and community preferences, among other factors, may well dictate the grade configuration within a school system, hence the wide range of different grade configurations across the nation.

Statistics from the National Center for Education Statistics reflect the current predominance of traditional elementary and middle school configurations in U.S. public schools. As shown in Table 1, of the 61,805 public schools for students through the eighth grade, about two-thirds are configured to transition students into either middle schools or junior high schools after the sixth grade. Only about 4,500 (7.4%) schools carry students from the earliest grades through the eighth grade. Slightly more than 10,000 schools (17%) are configured as traditional middle schools (grades 4, 5, or 6 to grades 7 or 8), with about 5,700 schools (9.2%) having other, less common grade configurations.

Table 1. U.S.Public School Grade Configurations—Number of Schools and Percentages of Configurations, 1996—1997

	Pre-K, K, or grade 1 to grades 3 or 4	Pre-K, K, or grade 1 to grade 5	Pre-K, K, or grade 1 to grade 6	Pre-K, K, or grade 1 to grade 8	Grades 4, 5, or 6 to grades 7 or 8	Other grade configurations	Total
Number of schools	4,910	20,570	15,578	4,543	10,499	5,705	61,805
% of total schools	7.9	33.2	25.2	7.4	17.0	9.2	99.9

Source: *Digest of Education Statistics, 1998. Chapter 2. Elementary and Secondary Education.* Available online at http://nces.ed.gov/pubs99/digest98/d98t099.html

Every grade configuration has its own strengths and weaknesses relative to the context in which the grade span occurs. In profiles of eight Northwest schools with seven different grade spans, Paglin and Fager (1997) demonstrate that school size and, by extension, grade configuration are often dictated by geographic location of the student population. By building on the strengths and minimizing the weaknesses found within every grade configuration, school administrators can provide effective educational services regardless of the particular grade span being used.

Paglin and Fager discuss three central issues related to grade span: (1) the appropriateness of grouping certain grades together, (2) the number of grades included in a school and the number of classrooms within each grade, and (3) the number of school transitions students will be required to make in their K-12 educational experience. Critical factors that typically come into play for schools with broad grade spans include the nature of the role modeling younger students receive from older students, the staff's training and experience, and building size. Schools with very narrow grade spans experience frequent student turnover, which can influence the school's identity and sense of community. Narrow grade spans also impose on students the stress of frequent school transitions.

In a section entitled "Historical Trends in Grade Configuration," Paglin and Fager note that since the 1970s the number of junior high schools has been in decline, signaling a conceptual change away from the junior high school as a "preparation for high school" toward the middle school as a "child-centered institution" that affords opportunity for "team teaching, advisory programs, and flexible scheduling."

The authors conclude that "no particular sequence of grade spans is perfect or in itself guarantees student achievement and social adjustment." The key, they say, is to focus on developing the positive potential within any given grade configuration.

In one of the very few empirical studies on grade span in the past decade, Wihry and his colleagues (1992) used data from an annually administered standardized test, the Maine Educational Assessment (MEA), to measure the influence of grade span on the academic achievement of eighth-graders. After analyzing the scores of eighth-graders in schools with different grade configurations, the researchers concluded that eighth-graders learning in elementary settings (K-8, K-9, and 3-8) outperformed eighth-graders in schools with other grade configurations. Eighth graders attending school in junior/senior school environments (grades 6-12, 7-12, and 8-12) performed less well than eighth-graders in all other grade configurations. "Full-scale" achievement and reading achievement were more related to the grade span variable than was mathematics achievement.

The question of why Maine eighth-graders in schools with elementary grade spans outperformed eighth-graders attending schools with different spans remains unanswered, prompting the authors to call for more research in this critical area. They suggest that "such considerations as instructional specialization (e.g., departmentalization), tracking, and within-class ability grouping, as well as staff recruitment and training practices, expectations of student performance, and sensitivity to individual differences among students" should be considered as potential explanations for this group's superior academic performance.

The complex relationship among these difficult-to-quantify variables presents an especially challenging research problem. But the authors note study in this area is of critical importance because their findings "call into question any simplistic assertion regarding the superiority of (nominally) middle-level schools."

Hough (1995) proposes the label "elemiddle" for schools following "the current trend toward aligning middle schools more closely with elementary programs." He characterizes these schools as including a focus on serving students between the ages of 10 and 14, typically in grades 5 through 8. This grade sequence is predominantly contained in K—8 schools, but also appears in schools having configurations of grades 4—8, 5—8, and Pre-K—8.

Hough credits recent research on "school programs, practices, and policies" with engendering a change in the educational perspective on this group of students. While noting that empirical research has not identified an optimal grade configuration, Hough nevertheless believes that the philosophies of elementary school education contained within the elemiddle school may well serve the needs of young adolescents better than the newer middle school structure (grades 6-9) or the traditional junior high structure (grades 7 and 8 or grades 7-9).

The impetus for establishing the primary-secondary school structure predominant in the 19th century was economic; it helped "facilitate the movement of children into the labor force," Hough explains. The development of the three-tiered elementary, junior high, high school structure has a similar history: Child labor laws in the early 20th century required that adolescents be better prepared for high school since they couldn't immediately become part of the workforce. Although middle school grade spans began to

emerge during the 1960s and 1970s, it was not until the 1980s, Hough says, that true educational reform at the middle school level took place.

Despite the changes in educational programs and philosophies at the middle school level, Hough still believes that "elemiddle schools, which include both primary and middle grades, may more easily facilitate the child-oriented programs conducive to young adolescent learning." He cites several studies showing that critical differences in educational programs and practices do exist among elemiddle, middle, and junior high schools.

Since 1985, Connecticut has used the Connecticut Mastery Test (CMT) to measure student achievement in reading, writing, and mathematics at the fourth-, sixth-, and eighth-grade levels. The CMT has also been used as a defacto accountability measure for schools whose students are taking the test. Three basic grade configurations are used at this level in Connecticut: K—5 and 6—8 (Type I), K—6 and 7—8 (Type II), or K—8. The K—5 schools were not accountable for the achievement levels of students who had attended Type I schools but had moved on to the sixth grade at a new school, while the K—6 schools were accountable for the achievement levels of their sixth-grade students (Tucker and Andrada 1997).

In 1994, a change in testing and reporting procedures required sixth-grade students attending new schools after graduating from a Type I, K—5 school to identify their former school. This allowed Tucker and Andrada to compare CMT data from this group of sixth-graders with CMT data from sixth-graders who were still at their original K—6 school. The researchers hoped to learn whether students attending schools with a K-5 grade span performed as well as their K—6 cohorts.

The results indicated that in all subject areas the performance of sixth-grade students at the Type II schools was better than the performance of sixth-grade students from Type I schools. Tucker and Andrada pose three possible explanations for this outcome:

1. There was less incentive for the school administering the sixth-grade portion of the test to prepare Type I students (who had just arrived at the school after completing fifth-grade elsewhere) for the CMT because the administering school would not receive credit for Type I students' performance.
2. Type I schools had no incentive to their prepare fifth-grade students for the sixth-grade portion of the CMT because those Type I schools were not being held accountable for their "graduates" performance at the administering school.
3. Information about the nature and importance of the sixth-grade portion of the CMT was not being made available to students and teachers in Type I schools; therefore, the teachers were not familiar with the best methods for preparing their fifth-grade students adequately for the CMT.

This study by Tucker and Andrada demonstrates the subtle ways in which grade span can work for or against students learning within a particular school system. The authors conclude by noting that school-level policies and practices can vary dramatically depending on the grade span used within a school.

Alspaugh (1999) has conducted several previous research studies investigating the effects of grade span on student achievement and other educational outcomes. In general,

he has found that students suffer achievement loss during each transition year they experience—that is, the transition year between elementary school and middle or junior high school, and the transition year between middle or junior high school and high school. Alspaugh also found that students typically gain back the achievement loss in the year following the transition year.

In this most recent study, Alspaugh looked at the effect of transition year, student gender, and grade span on high school dropout rates. Using a sample of 45 high schools—15 with students in grades 10-12, 15 with students in grades 9-12, and 15 with students in grades 7-12—he analyzed the relationship of the transitional year and other factors to the dropout rate within the groups of schools.

Alspaugh's analysis revealed that students who made the transition to high school at grade 7 (that is, those who attended high schools with the 7-12 grade configuration) dropped out significantly less often than did students making the transition at either the ninth- or tenth-grade level. Dropout rates were highest for students who made the transition at the tenth-grade level.

Overall, boys dropped out more frequently than girls, but the transition grade was still a significant factor among female students—girls who transitioned at grade 7 dropped out less frequently than girls who transitioned at either grade 9 or 10. Students in this study dropped out most frequently at the eleventh grade, regardless of the year in which they transitioned to high school.

Alspaugh suggests that the high dropout rate attributed to students transitioning to high school at grade 10 may occur because of the achievement loss experienced by many students during a transitional year.

References

Alspaugh, John W. "The Interaction Effect of Transition Grade to High School With Gender and Grade Level Upon Dropout Rates." Paper prepared for the American Educational Research Association, 1999. 17 pages. ED 431 066. *Available from:* ERIC Document Reproduction Service, 7420 Fullerton Rd., Suite 110, Springfield, VA 22153-2852. 800-443-3742. $4.46 plus shipping and handling. Web site: http://www.edrs.com/default.cfm

Hough, David L. "The Elemiddle School: A Model for Middle Grades Reform."

Principal 74, 3 (January 1995): 6-9. EJ 496 194. *Availability:* Not available from publisher.

Paglin, Catherine, and Fager, Jennifer. *Grade Configuration: Who Goes Where?* Portland, Oregon: Northwest Regional Educational Laboratory, 1997. 43 pages. *Available from:* Northwest Regional Educational Laboratory, Document Reproduction Service, 101 SW Main, Suite 500, Portland, OR 97204-3297. (503) 275-9519. Free.

Tucker, Charlene G., and Andrada, Gilbert N. "Accountability Works: Analysis of Performance by Grade Span of School." Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL, March 24-28, 1997. 23 pages. ED 411 278. *Available from*: ERIC Document Reproduction Service, 7420 Fullerton Rd., Suite 110, Springfield, VA 22153-2852. 800-443-3742. $4.46 plus shipping and handling. Web Site: http://www.edrs.com/default.cfm

Wihry, David F.; Theodore Coladarci; and Curtis Meadow. "Grade Span and Eighth-Grade Academic Achievement: Evidence from a Predominantly Rural State." *Journal of Research in Rural Education* 8, 2 (Summer 1992): 58—70. EJ 464 589. *Available from:* Not available from publisher.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

	This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.
X	This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").